The Strange Case of the Traveling Munchausen’s Earring: A Swallowed Foreign Body that Wasn’t

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Abstract
Factitious Disorder Imposed on Another (FDIA), formerly called Munchausen Syndrome by Proxy, is a disorder characterized by the falsification of symptoms of illness and diagnostic testing by a perpetrator in another individual to satisfy a psychological need of the perpetrator. This case report describes the clinical course of a 14-month-old female who presented with a purported swallowed foreign body who was eventually found to be a victim of FDIA following multiple presentations to the emergency department and extensive diagnostic workup. This manuscript aims to shed light on the complexity and potential harm that FDIA can cause patients as well as the burden on the healthcare system and to discuss the challenges in diagnosing FDIA in pediatric patients.

Keywords: Factitious Disorder Imposed on Another, Munchausen Syndrome by Proxy, Child Abuse

Introduction
Factitious disorder imposed on another (FDIA), formerly known as Munchausen’s syndrome by proxy (MSBP), defined in American Professional Society on the Abuse of Children (APSAC) as “abuse by pediatric condition falsification, caregiver-fabricated illness in a child, or medical child abuse that occurs due to a specific form of psychopathology in the abuser [1,2].” FDIA is diagnosed when there is conscious deception that is planned and concealed [2]. Signs of FDIA include worsening following discharge, symptoms inconsistent with a diagnosis, or reports of trauma. Radiological or laboratory diagnostics often aid in recognizing FDIA, repeat studies sharpen the differential and assess the factuality of the history. Potential FDIA must be reported to the Division of Child Protection and Permanency (DCPP).

Case Report
A 14-month-old female with a past medical history of reactive attachment disorder, esophageal reflux, and pneumonia who presented to the emergency department (ED) with concern of foreign body (FB) ingestion. At 18:00, the patient’s mother expressed concern that the patient swallowed a foreign object. She stated she had attempted retrieval at home, grasped the FB but was unable to remove it before her child swallowed it, gagged, vomited, and then cried. The mother denied cyanosis, syncope or breathing changes following this episode.

Physical exam showed pulse of 120, temperature of 98.6 °F, respirations elevated at 32, weight of 12.1 kg, and oxygen saturation of 100%. The patient was not drooling, coughing, or showing any evidence of airway compromise at presentation.

At 18:37 two view plain radiographs of the neck were obtained revealing a metallic FB, presumably an earring in the cervical esophagus (Figure 1. Images A and B). Due to the risk of a FB in the esophagus, subsequent radiographs were performed and otolaryngology was consulted. Subsequent plain radiograph images were taken at 18:42 and 18:45 which no longer evidenced the radiopaque FB. Otolaryngology performed a bedside flexible
fiberoptic laryngoscopy that revealed normal anatomy and no FB visualization.

Radiographs of the abdomen performed at 20:18 showed an earring in the right upper quadrant thought to be in a proximal small bowel loop (Figure 1. Images C and D). The patient was then discharged with recommendations to monitor the stool for a FB and return to the ED for any abdominal pain, oral intake intolerance, or difficulty breathing.

The next day at 07:58, the patient presented to the ED with reported vomiting, distress, and sleep difficulty. The patient’s mother reported the patient crying all night with no bowel movement since previous discharge. She stated that the patient typically has two bowel movements per day and that she had given a laxative the evening prior to readmission, prune juice at 04:00, and milk at 06:00. The patient was reported to have vomited at 07:00.

In the ER the patient’s pulse was 121, temperature 98.1 °F, respiratory rate 22, and oxygen saturation 100%. The patient appeared active without distress in her mother’s lap. She had normal breath sounds, no wheezes, or cough. The patient’s abdomen was soft with normal bowel sounds in the absence of distension or tenderness.

Plain radiographs were ordered. An abdominal AP radiograph at 08:28 evidenced the earring over the right perineal region outside of the GI tract (Figure 1. Image E), likely external to the patient. An AP abdominal radiograph at 08:34 revealed an adult hand in the image with the earring projecting over the first and third digits of the adult hand, external to the patient (Figure 1. Image F). Following this, the technologist requested the mother to remove her hand to capture the final abdominal radiograph at 08:36 which demonstrated no earring within the abdomen or pelvis.

Figure 1: Radiographic Images Throughout Hospitalizations

A. Initial radiograph of neck and soft tissue showing the appearance of an earring measuring approximately 1.5 x 1.6 cm in diameter in the proximal cervical esophagus.
B. Radiograph of neck and soft tissue showing the appearance of an earring measuring approximately 1.5 x 1.6 cm in diameter in slightly more distal cervical esophagus.
C. Follow up AP chest radiograph showing the earring in the right upper quadrant of the abdomen presumed to be in a proximal small bowel loop.
D. Follow up lateral chest radiograph showing the earring in the right upper quadrant of the abdomen presumed to be in a proximal small bowel loop.
E. Supine abdominal radiograph showing the earring over the right perineal region outside of the GI tract.
F. Erect AP abdomen radiograph at 08:34 revealed an adult hand in the image with the earring projecting over the approximated first and third digits, external to the patient.
After evaluating all radiographs, concern for intentional deception was considered due to the earring being identified outside of the patient’s body, in the mother’s hand, and no longer present once the mother moved her hand. The radiographs were reviewed with the mother, but she refused further FDIA screening. This case was remanded to DCPP for further evaluation and in-home visitation. These actions were added to the medical record for future reference. Upon discharge, the mother agreed to continuing fluids and to return for vomiting, pain, or distension.

**Discussion**

Diagnosing FDIA can be complicated, particularly in scenarios that occur in the pediatric population such as FB ingestion. Presenting symptoms of FB ingestion include choking, gagging, stridor, retching, blood in sputum, dysphagia, food refusal, distress, and irritability [3]. Initial care of FB ingestion is typically supportive with observation and reassurance. Certain scenarios such as ingestion of large or non-progressing / lodged FB in the pharynx or esophagus, or dangerous FB ingestion such as that of button batteries require endoscopic removal.

This case underscores challenges in diagnosing FDIA and highlights the potential for unnecessary procedures if FDIA is missed. In this case, imaging discrepancies and inconsistent findings triggered suspicion of FDIA, leading to the involvement of DCPP. Had these inconsistencies been missed, the factitious FB ingestion could have resulted in unnecessary surgery. Previous reports evidence infants with complicated histories presenting to emergency departments with “ingestion of foreign bodies”, risking unnecessary and potentially harmful procedures [4].

**Conclusion**

Clinical studies note that caregivers who can acknowledge their abuse benefit from family support and direct treatment with individual therapy, family therapy, therapy for the abused child, and co-parenting therapy if they share responsibilities with another caretaker [5]. Pediatric practitioners must remain vigilant to diagnose FDIA when suspicion arises to prevent the risk of unnecessary procedures. Emergency room practitioners, otolaryngologists and radiologist should maintain FDIA on their differential diagnosis when pediatric patients present with foreign body ingestion.

**Declaration of Competing Interest**

The authors have no conflicts of interest to disclose.

**References**